

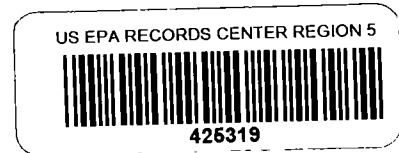
**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V**

DATE: May 11, 1989

SUBJECT: NASA, Lewis Research Center, Cleveland, Ohio; and NASA, Plum Brook Station, Sandusky, Ohio

FROM: A. R. Winklhofer, Chief 5SEDO *AW*
Eastern District Office

TO: William Franz, Chief 5ME
Environmental Review Branch



This past week, I received calls from complainants alleging a variety of environmental problems at both of the subject facilities. Attached is a summary of the complainants' conversations. On May 10, 1989, I received, from an unknown source, a copy of an internal NASA memo that also identifies a number of environmental concerns at both facilities.

The alleged concerns relate to the RCRA, UST, Air, TSCA, and NPDES Programs. Copies are hereby provided for their appropriate action.

Attachments.

cc: Bill Muno, 5HR
Gerald Phillips, 5HR
Larry Kertcher 5AC
Phyllis Reed, 5SPT
Donald Schregardus, 5WQC

RECEIVED

MAY 19 1989

**ENVIRONMENTAL REVIEW BRANCH
PLANNING & MANAGEMENT DIV.**

Summary of Complaint Calls

NASA - Lewis Research Center and Plum Brook Station

May 3, 1989

1. Anonymous woman caller

She claimed to have a PhD in risk assessment/environmental health and was not a NASA employee. However, a NASA employee asked her to look into several environmental concerns at the NASA facilities in Cleveland and Sandusky, Ohio. She said employees were concerned about a barrel storage area that was not in compliance with RCRA and its proximity (600 ft.) to a recently opened preschool center at the Lewis Research Center. In the storage area are:

- 12-25 gallon drums of Hydrazine which have been there since 1986.
- Barrels containing waste mercury material.
- Barrels containing waste petroleum products.

Employees, she said, were also concerned about 75 gallons of PCBs that were lost at the Plum Brook Station several years ago. She had no specific information about the incident.

2. Dan Watson, NASA employee

Dan called to report that 10 to 20 tons of sludge had been dumped the weekend before last, by parties unknown, on Lewis' "Back 40" lot. The security gate had been left open. Security personnel are investigating. Samples of the sludge were collected for analysis. Results are expected in a few days. Preliminary data indicate the sludge contains metals and chlorinated organics.

NASA is also checking contractors including Cortez, who subcontracts with Research Oil to handle still bottoms. NASA will hire Samsel to cleanup the sludge. Dan said he tried unsuccessfully to notify Bill Muno and Lou Halkias for assistance to investigate the incident.

I asked Dan about the drum storage area. He said the storage area conformed to RCRA requirements. The Hydrazine was not a waste. It was purchased in 1986 for a research project. The 12 drums are no longer needed. Based on the results of tests for stability, the Hydrazine will either be shipped to other NASA facilities for use or disposed. Dan indicated that employees have also been complaining to the OEPA about a variety of environmental problems including allegations of buried hazardous wastes in the "Back 40" lot.

May 4, 1989

1. Anonymous woman caller

She alleged:

- a. 15 tons of sludge were dumped on "South 40" lot last weekend at the Lewis facility. The security gate had been left unlocked. NASA is investigating.
- b. A quantity of PCBs was lost in Building 9006 at the Plum Brook facility. She did not know when, but said she could obtain and send me a report on the incident.
- c. 75 gallons of PCBs were spilled in 1982 at the Plum Brook facility. The incident was not reported. Rather than clean it up, NASA covered the area with concrete.
- d. Many other problems (not described) exist at both facilities but are not detected by State/Federal inspectors.

May 8, 1989

1. Dan Watson, NASA employee

Dan stated that NASA's investigation of the sludge dumped on Lewis' "Back 40" lot was continuing. Laboratory data indicates the sludge is a hazardous waste. Stains have been found in a nearby ravine leading to Abrams Creek, suggesting the dumpers may have disposed of the liquid in the truck before dumping the sludge. However, no responsible party has been identified.

Concerning NASA's Plum Brook Station, Dan stated that:

- a. There are many environmental problems at this facility that are not being addressed. Although the facility was slated for shutdown in the mid 70's, NASA has increased the operation of the facility. In addition to a handful of NASA employees, the facility is staffed by about 200 contract (Swerdriff) employees.
- b. There is a major problem with deteriorating asbestos insulation and asbestos dust in buildings.

- c. Many PCB transformers are improperly stored on pallets.
- d. Air sources do not have permits. Because of the planned shutdown, the OEPA has not pursued the matter since the facility continued to operate.
- e. The nuclear reactor was not shut down properly. There are reports of radiation contamination both on and off site.
- f. There are highly contaminated (TNT) red water waste lagoons.

Lewis Research Center
Cleveland, Ohio
44135

Reply to Attn of

7380

April 18, 1989

TO: 7000/Director of Technical Services
4000/Chairman, Environmental Pollution Control Board

FROM: 7380/Chief, Environmental Health and Chemical Analysis Branch

SUBJECT: Environmental Priority Concerns and Health and Safety Priorities

A. ENVIRONMENTAL PRIORITY CONCERNS

1. The storage room in the basement of Building 7

According to recently discovered records, this room was heavily contaminated with mercury. In a 1981 study, mercury was found in drains located inside the storage room and in soils outside the building. Soil borings as deep as 12 feet showed significant mercury levels. According to NASA sources, the room was locked up after this discovery and no clean up was conducted. This is in direct violation of RCRA, CERCLA, and possibly the Clean Water Act.

2. Building 9206 Plum Brook Station

Records show that 80+ gallons of PCB dielectric fluid, which was spilled in 1981, has not been cleaned up. A "study" of this problem is in the FY 91 plan. This is an unreported spill, which was not cleaned up, and is a direct violation of CERCLA and TSCA.

3. Underground Storage Tanks Plum Brook Station

There are two underground storage tanks at Plum Brook Station which are reportedly leaking. These tanks must be removed and the spilled material cleaned up. Not taking these actions, are direct violation of CERCLA and RCRA.

4. Building 415 and Hazardous Waste Sattelite Areas

This building and its operators do not meet the following RCRA requirements:

- a. The storage area is in the 100 year flood plain.
- b. The workers do not have the required training.
- c. Incompatible wastes and feedstacks are not segregated.
- d. Hazardous wastes and feedstacks are not properly segregated.

This is a contract operation and the contract needs to be immediately rewritten, so it requires the things that RCRA mandates. The situation at Building 415 is similar to the situation that caused federal employees to be convicted of criminal offenses at the Aberdeen Proving Grounds.

5. Building 109

This is a facility where parts, which are contaminated with mercury, are decontaminated. This facility is operated by Colejohn personnel. The problems here are:

- a. The waste handlers do not have the training required by RCRA.
- b. They are dumping waste and chemicals into sewers and on the ground in violation of RCRA and CERCLA.
- c. They are operating a mercury decontamination oven with no air pollution permit in violation of the Clean Air Act.
- d. Incompatible chemicals are not properly stored or segregated.
- e. Parts waiting to be decontaminated are stored outside where they are contaminating soils.

6. PCB Record Keeping Plum Brook Station

Personnel are not inspecting PCB items and documenting these inspections as required by TSCA. They also are not preparing PCB annual reports. Both these items have been required by TSCA since 1979.

7. Testing of PCB Hydraulic Systems

Not all the hydraulic systems at LeRC have been tested. TSCA required the testing of all hydraulic systems by 1979 and their decontamination by 1984.

8. IWS

This system contains 25 separator tanks, most of which are badly deteriorated and possibly leaking. If leaking, these could be a violation of RCRA and CERCLA. The fact that they are not maintained could be a violation of the CWA.

A separate item is the South 40 Landfill. More studies are needed to determine if it is a Superfund site. EBASCO did not properly address the problem at the landfill in the PA/SI.

The problems above were surfaced by the staff of the Environmental Health and Chemical Analysis Branch. These are probably only a small portion of the real or potential EPA violations at LeRC. Because our branch does not have the funds or manpower to fully investigate the problems that may exist at the laboratory, we can not give you a comprehensive listing of LeRC's regulatory liabilities.

1. Hazard Communication

Federal agency compliance dates: labeling, inventory, written program - January 1989 training - July 1989.

2. Contractor Safety

Support service contractors handling LeRC hazardous materials are not appropriately trained per OSHA Health and Safety Regulations

e.g. Hazard Communication 29CFR 1910.1200

Emergency Response 29CFR 1910.120

Respiratory Protection 29CFR 1910.134

Hearing Conservation 29CFR 1910.95

etc.

3. Personal Monitoring Program

LeRC must evaluate personal exposures to hazardous materials in the workplace - 29CFR 1910.1000.

4. Chemical Storage Guidelines

Such guidelines must be developed on the laboratory. Improperly stored materials and poor disposal practices have created a significant health and safety hazard.

5. Building 49

The exhaust/supply system in the South Penthouse must be separated.

6. Future Needs / Future Legislation

a. Lead Paint Abatement Program

b. VDT Program

c. Laboratory Safety Program

d. Indoor Air Quality Program

e. Microwave/ Radio frequency Program

f. Confined Space Program

Albert B. Smith

Chief, Environmental Health and Chemical Analysis Branch

cc:

7300/A. B. Szuhai

7300/D. W. Newland

7380/A. B. Smith

7380/M. W. Mapp

7380/L. Y. Jeziorowski

7380/D. C. Watson

7380/Official File